SWAN RIVER NATIONAL WILDLIFE REFUGE

Kalispell, Montana

ANNUAL NARRATIVE REPORT

Calendar Year 2001

U.S. Department of the Interior
Fish and Wildlife Service
NATIONAL WILDLIFE REFUGE SYSTEM

REVIEWS AND APPROVALS

SWAN RIVER NATIONAL WILDLIFE REFUGE

Kalispell, Montana

National Bison Range Complex Moiese, Montana

ANNUAL NARRATIVE REPORT Calendar Year 2001

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Regional Office Approval	Date

INTRODUCTION

The Swan River National Wildlife Refuge (NWR), is located in northwest Montana, 38 miles southeast of the town of Creston, in the serene and picturesque Swan Valley Mountain Range. The Refuge was established in 1973 at the request of Montana Senator Lee Metcalf, who often hunted the area and desired to see it preserved. The Refuge was established under the authority of the Migratory Bird Conservation Act. It consists of 1,568 acres, with an additional 210-acre Forest Service in-holding that is managed under a Memorandum of Understanding. The refuge boundary lies within the flood plain of the Swan River above Swan Lake and between the Swan Mountain Range to the east and the Mission Mountain Range to the west. The valley was formed when glacial water poured down the steep slopes of the Mission Range into Flathead Lake. The valley floor is generally flat, but rises steeply to adjacent forested mountain sides. Approximately 80 percent of the refuge lies within this valley flood plain, which is composed mainly of reed canary grass. Deciduous and coniferous forests comprise the remaining 20 percent. Swan River, which once meandered through the flood plain, has been forced to the west side of the refuge by past earthquakes and deposits of silt. The result of these geologic events is a series of oxbow sloughs within the refuge flood plain.

The purpose of the refuge is "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Objectives of the refuge are to provide for waterfowl habitat and production and to provide for other migratory bird habitat. The refuge also provides a nesting site for a pair of bald eagles and a variety of other avian species. In addition, deer, elk, moose, beaver, bobcat, black bear and grizzly bears are known to inhabit the area. There are no significant developments or facilities on the refuge and present management is directed at maintaining the area in its natural state. The refuge is a satellite unit of the National Bison Range Complex. Day-to-day administration and operations are the responsibility of the on-site Assistant Refuge Manager located at Lost Trail National Wildlife Refuge, Marion, Montana.

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A. HIGHLIGHTS

In 2001 there were no specific highlights associated with any activities on the Refuge. The Refuge is somewhat isolated and management activities this year were concentrated on other "north valley" land units, particularly the newly established Lost Trail Refuge.

However, Swan Refuge continued to serve the mission of the Service and the public by offering scenic, tranquil, bird watching opportunities, as well as nesting, loafing and feeding habitat for a variety of waterfowl, raptors and other bird species.

B. CLIMATIC CONDITIONS

With the exception of total annual snowfall amounts, climatic conditions in the Swan Valley area are similar to climatic conditions in the Flathead Valley. In 2001, our Swan Valley "weather reporting volunteers" did not record weather data from their home in Swan Lake; therefore, no specific weather data is available for the Refuge. Weather data in Flathead County continues to be recorded by the U. S. Weather Service's automated recording station located at Glacier International Airport, eight miles north of Kalispell. Record highs were recorded in May (89 degrees), July (95 degrees) and November (56 degrees). Frosts occurred every month of the year. A monthly recorded low of 22 degrees was recorded on May 6. The overall low for the year was a minus 26 degrees recorded on February 8.

Dry and parched conditions this year continued northwest Montana's four-year drought. Only 0.06 inches of precipitation fell in August. Precipitation for the year totaled 12.48 inches, 4.71 inches below average.

C. LAND ACQUISITION

1. Fee Title

There was no land acquisition

2. Easements

Nothing to report.

3. Other

Nothing to report.

D. PLANNING

1. Master Plan

Nothing to report.

2. Management Plan

Nothing to report.

3. Public Participation

Nothing to report.

4. Compliance with Environmental and Cultural Resource Mandates (CECRA)

5. Research and Investigations

Amphibian Survey of National Bison Range, Lost Trail NWR, and Swan River NWR - Blake Hossack, David Pilliod, Stephen Corn, USGS Northern Rocky Mountain Science Center, Aldo Leopold Wilderness Research Institute, Missoula, Montana

Full reports can be found in NBR research files.

<u>Background</u>: There are known and suspected declines of amphibians in many parts of North America, including losses in relatively pristine areas such as National Parks, wilderness areas, National Wildlife Refuges. In response to these declined, a national effort identified as the Amphibian Research and Monitoring Initiative (ARMI) was launched in 2000 to determine the status and trends of amphibian populations on Department of Interior lands nationally and to provide information useful in determining causes of declines.

Native amphibians known to occur on or in the vicinity of refuge lands administered by the National Bison Range include: long-toed salamander (Ambystoma macrodactylum), Rocky mountain-tailed frog (Ascaphus montanus), boreal toad (Bufo boreas), Pacific treefrog (Pseudacris regills), and Columbia spotted frog (Rana luteiventris).

Objectives:

- 1. Document the amphibian species present at the National Bison Range, Lost Trail NWR and Swan Lake NWR, and their relative occurrence (percent of sites occupied).
- 2. Collect voucher specimens of larvae of each species to provide a permanent record of occurrence.

<u>Survey Methods</u>: Amphibian occurrences were documented using visual encounter surveys. Surveyors searched the shallow areas of each wetland, using dip nets in areas with vegetation or where water clarity was poor. Surveys are designed to detect all life stages of amphibians; however detection of evidence of breeding activity (presence of eggs or larvae) is emphasized. Data collected yields information on the presence of a species but does not establish absence, nor does it give reliable estimates of abundance.

Surveyors documented breeding locations and various life history stages (eggs, larvae, juvenile and adult) of observed taxa. At NBR a subset of wetlands that provided relatively even coverage of the Refuge, at Lost Trail most semipermanent and seasonal wetlands were dry, and at Swan River four locations were surveyed. All were geo-referenced with G.P.S.

Results:

<u>National Bison Range</u> - Twenty-eight wetlands were surveyed for amphibians between May 9 and June 21. Amphibians were found at 15 sites, with evidence of reproduction found at 12 sites. *A. macrodactylum* was the most commonly encountered amphibian at NBR, with breeding detected at ten sites, followed by evidence of reproduction by the *P. regilla* at three sites and *R. luteiventris* at one site.

Lost Trail NWR - Twenty sites were surveyed for amphibians at LTR NWR between June 11 and June 14. Reproduction was found by *A. macrodactylum* at one site, by *B. boreas* at four sites, by *P. regilla* at three sites, and by *R. luteiventris* at one site. Adult or juvenile *R. luteiventris* were found at an additional nine sites where breeding was not detected, making it the species most frequently encountered. The abundance of *B. boreas* breeding sites was high (five of 20 sites) compared with surveys of western Montana at less than 5 percent.

<u>Swan River NWR</u> - Four sites were surveyed at Swan River NWR on July 6. Three of these sites were large water bodies or ditches and were not sampled completely. Evidence of reproduction by *R. luteiventrisi* was found at two sites, and adults were found at the other two sites. One *T. sirtalis* was also seen.

Management Recommendations -

- 1. An amphibian observation survey should be established for *A. macrodactylum, B. boreas, P. regilla,* and *R. luteiventris.* Adults of these species can be identified by refuge biologists and seasonal employees with brief training.
- 2. *B. boreas* breeding sites at Lost Trail NWR, and any other breeding sites that may be detected on other refuge units, should be monitored. USGS plans to establish a monitoring program for *B. boreas* at Lost Trail NWR but are unlikely to survey all refuge units.

E. ADMINISTRATION

1. Personnel

The Swan River NWR is a satellite unit of the National Bison Range Complex (NBR). Assistant Refuge Manager Ray Washtak directs operations on the Refuge from the refuge office at Lost Trail NWR near Marion, Montana. Refuge activities such as budgeting, administrative and operational functions are supervised by the Project Leader at NBR.

Micah Dent EOD'ed to Lost Trail Refuge on April 1, as a biological technician to assist with activities on Swan Refuge and other "north valley" units. Dent terminated his employment on September to take a full-time law enforcement position with the Veteran Administration in Maryland. Karen Dent volunteered with various activities on Swan Refuge and other "north valley" units.

2. Youth Programs

Nothing to report.

3. Other Manpower Programs

Nothing to report.

4. Volunteer Programs

Washtak and Karen Dent met with the Swan Lake Chamber of Commerce to discuss volunteer projects. Dick and Bev Sherman repaired the refuge sign that blew over during high winds.

Dick and Bev Sherman and Ken and Rosalie Duffy continued their volunteer efforts this year on the refuge by keeping the informational kiosk stocked with refuge brochures and bird lists as well as completing periodic maintenance on the viewing platform. In August, they repaired the Refuge sign that had been damaged by high winds.

The volunteers also replaced refuge boundary signs as needed throughout the year and maintained wood duck boxes and Canada goose nesting sites along the Swan River. Their volunteer hours this year totaled an estimated 240 hours.

Table 1. Volunteer hours for 2001.

Activity	Volunteer Hours
Habitat Management Pest Plant Control	40
Resource Protection Law Enforcement	22
Public Education and Recreation Provide Visitor Services	100
TOTALS	162

5. Funding

Administrative and operational funding for the Refuge is included in the overall annual appropriation of the National Bison Range (NBR) complex. Specific funding needs for the Refuge are submitted to the project leader via annual work plan submissions. See the National Bison Range annual narrative for specific funding details.

6. Safety

Nothing to report.

7. Technical Assistance

Nothing to report.

8. Other

F. HABITAT MANAGEMENT

1. General

Nothing to report.

2. Wetlands

Approximately 1,254 acres of the refuge are classified as a wetland/grassland complex. The acreage lies within an "alluvial flood plain" adjacent to the south end of Swan Lake. Vegetation is composed primarily of monotypic stands of reed canary grass.

With the exception of a culvert under Bog Road in Spring Creek and a staff gauge within the creek, which in the past has been used for recording water flow levels, no other water control structures, facilities or developments exist on the refuge.

Flooding of the refuge occurs on an annual basis in - May, June and July. Flood water flows into the refuge from several tributaries: Swan River, Bond Creek, Yew Creek and Spring Creek.

3. Forests

Forested areas comprise approximately 313 acres of the refuge. Wooded tracts lie primarily on the west, south, and southeastern portions of the refuge. Tree species include old growth fir, spruce, cedar and larch. Large cottonwood trees are found along the banks of the Swan River. All forested units are maintained in their natural state.

4. Croplands

Nothing to report.

5. Grasslands

Nothing to report.

6. Other Habitats

7. Grazing

There was no grazing on the refuge in 2001 due to lack of willing permittees.

8. Haying

There was no haying on the refuge in 2001. Agricultural practices are limited in the Swan Valley area. Hay permittees on WPA's near Kalispell are reluctant to travel to the refuge for haying opportunities. Haying of the dense stands of monotypic stands of reed canary grass would be beneficial in restoring vegetative quality, as well as providing additional open marsh area's for waterfowl pairs and broods.

9. Fire Management

Nothing to report.

10. Pest Control

Nothing to report.

11. Water Rights

Nothing to report.

12. Wilderness and Special Areas

Nothing to report.

13. WPA Easement Monitoring

G. WILDLIFE

1. Wildlife Diversity

Nothing to report.

2. Endangered and/or Threatened Species

Transient bald eagles are observed on the Refuge.

3. Waterfowl

a. Ducks

Results of the midwinter aerial waterfowl survey for Swan River NWR included 50 mallards, 50 common goldeneyes, 10 mergansers. The Refuge was snow covered, with the birds on the river portion of the Refuge.

Pair counts were not conducted this year.

b. Geese

Canada goose populations are based on random observations made throughout the year. The goose productivity flight was flown in early June; however, no goslings were observed on the Refuge this year. This may, or may not reflect actual production since goslings are often hard to observe due to heavy vegetation on the Refuge which limits our observation attempts and the fact goslings often migrate to other "off-refuge" areas on the river and lake.

4. Marsh and Water Birds

Annual flooding on the refuge in the late spring and early summer months provided excellent marsh habitat for sora, rails, pied-billed grebes, red-necked and horned grebes, American bitterns, great blue herons and many other species of marsh and water birds. Populations peak during the mid and late summer months. As cooler weather sets in, the birds depart for warmer climates. Nesting probably occurs on the Refuge; however, no formal nesting searches were conducted.

5. Shorebirds, Gulls, Terns and Allied Species

Species utilizing the refuge included California and ring-billed gulls, black tern, Wilson's phalarope, common snipe, American avocet, kill deer and several species of sandpipers. Populations peak in July and August.

6. Raptors

Coniferous and deciduous forest areas on the refuge continued to offer excellent resting and loafing sites for many raptor species. Northern harriers, Swainson's hawks, red-tailed hawks and great-horned owls were observed on nearly every visit to the refuge.

7. Other Migratory Birds

In past years, as many as 64 species of non-game migratory birds have been observed utilizing the Refuge during the spring, summer and early fall months. Red-winged blackbirds, common yellow-throats, song sparrows, tree swallows and common snipe are the most frequently observed species.

8. Game Mammals

The Refuge continues to provide an excellent year-round habitat for many indigenous big game mammals. Deer and elk tracks are commonly seen in most upland areas on the Refuge and on Bog Road. Black bear scat has been commonly observed in areas bordered by Nature Conservancy lands. In the late summer and early fall months, cow moose and their calves are often observed in marshy areas in the northwest corner of the Refuge. Elk are known to winter within the old growth fir and spruce groves.

White-tailed deer are the most commonly observed game mammal.

9. Marine Mammals

Nothing to report.

10. Other Resident Wildlife

Coyotes, beaver, muskrat and raccoons inhabit the Refuge. Observations were generally made near the river or on backwater sloughs with the Refuge.

11. Fisheries Resources

Game fish common to Swan Lake and portions of Swan River include yellow perch, bull trout, northern pike, kokanee salmon, largemouth bass, cutthroat, brook trout and mountain whitefish. The entire Refuge, including Spring Creek, is closed to fishing as part of the annual Refuge closure from March 1 through July 1 (Section H.1.)

12. Wildlife Propagation & Stocking

Nothing to report.

13. Surplus Animal Disposal

Nothing to report.

14. Scientific Collections

Nothing to report.

15. Animal Control

Nothing to report.

16. Marking and Banding

Nothing to report.

17. Disease Prevention and Control

H. PUBLIC USE

1. General

Despite the Refuge's generally secluded, out-of-the-way location, lack of established interpretive foot trails and annual flooding, non-consumptive public use of the Refuge continues. Estimates of public use and visits are based on random observations and increased volunteer efforts to maintain adequate refuge maps and brochures in the informational kiosk; however, the exact number of Refuge visitors cannot be determined.

2. Outdoor Classrooms - Students

Nothing to report.

3. Outdoor Classrooms - Teachers

Nothing to report.

4. Interpretive Foot Trails

Nothing to report.

5. Interpretive Tour Routes

Nothing to report.

6. Interpretive Exhibits/Demonstrations

Nothing to report.

7. Other Interpretive Programs

Nothing to report.

8. Hunting

Approximately 40 percent of the Refuge is open to waterfowl hunting. The majority of the waterfowl hunt area is located north of Bog Road, along portions of the Refuge's lake shoreline and along portions of Swan River. Steel shot is required. Big game and upland game bird hunting is prohibited.

The 2001-2002 duck and goose season opened September 29. Hunter activity was light; early season success was sporadic. Freeze-up occurred in mid-November, thereby limiting waterfowl hunting to those open areas of the river; success continued to be sporadic until the season closed in early January.

9. Fishing

The annual closure period limits spring and early summer fishing activity on the Refuge. After July 15, anglers often venture into Spring Creek looking for pike; however, success has always been limited due to heavy vegetation in the creek. Those portions of Swan River which flows through the Refuge are open to fishing the entire year. Fishing activity is often limited in the river due to high water levels during the spring and early summer months and low flows in late summer and early fall.

The most popular fishing spot on Swan Lake continued to be at the mouth of Spring Creek just outside the Refuge boundary. Northern pike lie in the reed beds before going upstream to spawn in the dense aquatic vegetation inside the Refuge. Fishermen take advantage of the situation by anchoring just outside the Refuge boundary.

10. Trapping

Nothing to report.

11. Wildlife Observation

Nothing to report.

12. Other Wildlife-Oriented Recreation

Nothing to report.

13. Camping

Camping is not allowed on the Refuge.

14. Picnicking

Nothing to report.

15 Off-Road Vehicle Use

16. Other Non-Wildlife Oriented Recreation

Nothing to report.

17. Law Enforcement

As in past years, law enforcement efforts are coordinated with Montana Department of Fish, Wildlife and Parks (MDFWP) wardens. Due to its isolated nature and the distance from the administrative headquarters at Lost Trail Refuge nearly 100 miles away "LE incidents" generally become known well "after the fact," making enforcement difficult. The most common enforcement complaints occur during the winter months when snowmobilers trespass on the Refuge occurs.

18. Cooperating Associations

Nothing to report.

19. Concessions

I. EQUIPMENT AND FACILITIES

1. New Construction

Nothing to report.

2. Rehabilitation

Discussions were held with state highway supervisor, Tim Darr, concerning the highway approach on Bog Road, and improvement of Bog Road leading to the viewing platform. In September, upgrades to the highway approach and apron were completed in order to meet state highway standards. In addition, \$1500 worth of crushed rock was added to the approach and the road. See figures 1 and 2, page 16.

3. Major Maintenance

Nothing to report.

4. Equipment Utilization and Replacement

All equipment on the Refuge is utilized for on-going daily operations and work activities on Flathead County WPA's and Lost Trail Refuge. See the Lost Trail NWR annual narrative report (2001) for specific information.

5. Communications Systems

Nothing to report.

6. Computer Systems

Nothing to report.

7. Energy Conservation

Nothing to report.

8. Other



Figure 1 The Bog Road entrance off of State Highway 83 prior to rehabilitation. The approach did not meet state highway standards for width and grade. RW 10/97

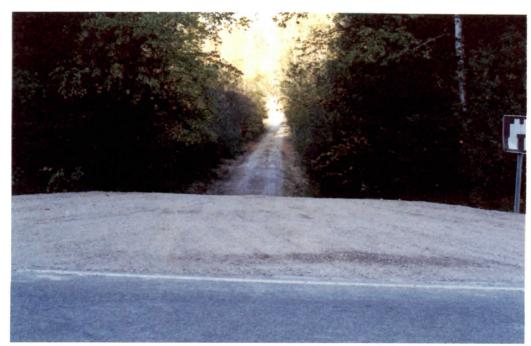


Figure 2 With the State of Montana's assistance and a private contractor, the approach and highway apron were widened and regraded for the safety of the visiting public.

RW 9/01

J. OTHER ITEMS

1. Cooperative Programs

Nothing to report.

2. Other Economic Uses

Nothing to report.

3. Items of Interest

Nothing to report.

4. Credits

Ray Washtak supplied information and the final draft for this narrative. Initial drafts, final typing and compilation were completed by Terri Middlemist at the National Bison Range.

K. FEEDBACK

- Game fish include yellow perch, bull trout, northern pike, kokanee salmon, largemouth bass,
- cutthroat trout, brook trout and mountain whitefish.

 A state plant species—of—concern, water howelia (Howellia aquatilis) can be found on the Nature Conservancy Preserve that borders the southern edge of the refuge, but the plant has not been confirmed to exist on the refuge to date.

History:

- The refuge was established in 1973 under authority of the Migratory Bird Conservation Act, at the request of Montana Senator Lee Metcalf, who desired to see the area preserved.
- The refuge is a statellite unit of the National Bison Range. Day—to—day administration and operations are the responsibility of the Assistant Refuge Manager located at Lost Trail National Wildlife Refuge, Marion, MT.

Cultural Resources:

To date, there are no known cultural resources.

Recreational Uses:

- Portions of the refuge are open to waterfowl hunting, with the majority being located north of Bog Road and along portions of Swan River.
- Big game and upland game bird hunting is prohibited. Trapping is prohibited.
- Fishing is not allowed on Spring Creek from March 1 through July 15; fishing is allowed on those
- portions of Swan River which flow through the refuge.

 The refuge is listed in the state Watchable Wildlife Guide and receives a number of visitors to
- view some of the 171 bird species and deer, elk and black bear. Boating is allowed through the refuge on Swan River.
- Bog Road (not maintained and not recommended for vehicles) traverses the refuge east to west.

 The road is open for wildlife observation, photography and provides access to the interior portion

of the refuge.

Other Uses:

Haying and grazing are conducted periodically with a Special-Use Permit for habitat management purposes.

AMERICA'S NATIONAL WILDLIFE REFUGES...









FACTS from the National Wildlife Reguge System

Swan River National Wildlife Refuge

http://bisonrange.fws.gov Fax: 406/644-2661 Phone: 406/644-2211

:ssənbbA Refuge Manager naməziW biva@ Contact:

Moiese, MT 59824 132 Bison Range Road Agrional Bison Range

Address: Lost Trail NWR Site Manager: Ray Washtak

Marion, MT 59925

6295 Pleasant Valley Road

E-Mail: ray_washtak@fws.gov Fax: 406/858-2218 Phone: 406/858-2216

Location:

Located in northwest Montana, 38 miles southeast of Creston, in the Swan Valley.

Establishing Purpose:

purpose, for migratory birds" (Migratory Bird Conservation Act, 16 U.S.C. 715-715r). Lands were acquired in 1973 "for use as an inviolate sanctuary, or for any other management

Memorandum of Understanding by the USFWS. 1,568 acres, with an additional 210-acre Forest Service inholding that is managed under a Acreage:

Landscape Characteristics:

The valley was formed when glacial ice poured down the steep slopes of the Mission Range into Mountain Range to the east and the Mission Mountain Range to the west. The refuge lies within the floodplain of the Swan River above Swan Lake and between the Swan

The valley floor is generally flat but rises steeply to adjacent forested mountain sides.

80% of the floodplain is composed of reed canary grass and the other 20% consists of forests of

the refuge by deposits of silt, leaving a series of oxbow sloughs within the refuge floodplain. Swan River, which once meandered through the floodplain, has been forced to the west side of old growth fir, spruce, cedar and larch. Large cottonwood trees exist along the river.

There are no significant developments or facilities on the refuge.

:9JilbliW

The refuge provides a nesting site for a pair of bald eagles. Waterfowl species consist of Canada geese, mallards, cinnamon teal and common goldeneye.

hawks and great-horned owls. Other birds of prey frequenting the area include northern harriers, Swainson's hawks, red-tailed

Sora and Virginia Rails hide among the reeds while foraging.

White-tailed deer are the most common large mammal seen. Elk, moose, beaver, bobcat and Marsh wrens, song sparrows and yellow-headed blackbirds nest and forage on the Refuge.

raccoons. black bear are known to inhabit the area. Other resident wildlife are coyotes, beaver, muskrat and

torage. threatened grizzly bear, and bears sometimes move onto the refuge during the early spring to The Swan and Mission Mountain Ranges have been designated as a "habitat corridor" of the

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°	0	n	'n	
	- 1			Brown Creeper

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0	n	n	n	Ring-necked Duck
0	n	0	n	Canvasback
*	0	0	0	Tesser Scanp
5	5	3	5	• Common Goldeneye
0	n	n	5	Barrow's Goldeneye
	n	n	5	Mhite-head scoter
			1	Harlequin Duck
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,			n	Swainson's Hawk Rough-legged Hawk
			,	godgen Eagle nawk
3	3	,	3	• Bald Eagle
		2	n	● Marsh Hawk
1		٥.	1	
ŀ	0	•	0	Prairie Falcon Prairie
	0	1	0	
	0	,	0	• American Kestrel
		184	Tree	GROUSE, PHEASANTS
0	0	0	0	Blue Grouse Blue
. ၁)	2	2	Ruffed Grouse
0	٥		0	King-necked Pheasant
		11 282	8	RAILS
		2	n	plog •—
	5	5	5	····· American CooJ
E.	91			PLOVERS
	2	2	2	• Killdeet
				гновевівру, спіть, теких
n	0	2	5	Sommon Snipe
	n	2 1	0	Spotted Sandpiper
		°	0	— Somety Sandpher Greater Yellowlegs
		n	٥	Fesser Yellowlegs
		n	0	Least Sandpiper
		n	n	Long-billed Dowitcher
			0	Marbled Godwit
		- 1	0	American Avocet
			0	Black-necked Stilt
		n	C	Wilson's Phalarope
	n	n	0	California Gull
	0	0	0	Ring-billed Gull
	n	0	0	

tsuguA-anul —2 2— Матсһ-Мау Seasons: **EXPLANATION OF SYMBOLS:**

F- September-November

W — December-February

Birds nesting on the Refuge are preceded by a •.

species are as follows: Symbols indicating seasonal abundance of each

seen at intervals of 2 to 5 years seen only a few times during a season might see in suitable habitat should see in suitable habitat

o-occasional n—nucowwou c—common

A.O.U. Check-List as amended. New names are used in The following bird list is in accordance with the 5th

all cases.

۸	H	s	s																				
	C	,	,	1	•	•	•	•	•	•				•	•	•	•	•	•	•	i di		LOONS
	2			1			8											1			į.	12	GREBES
)))	١.	•	•	•	•	•	•	•		•	•	•	•	•	•	•			•	• Red-necked Grebe
	כ	ס)	1			•	•	•	•			•	•	٠	•	•	•	•				• Horned Grebe
0)	2)	١.	٠	•	•	٠	٠	•	•		•		•	•	•						Sared Grebe
		ס	n		•	•	•	•	•	•		•	•	•	٠	٠	٠	•	•	• •	•	•	Mestern Grebe
		2	5				•	•	•				•	•	•	•	•	•	٠.		•	•	. Pied-billed Grebe .
	ac.		0		٠	•	٠	•	•	•		•	•	•	•	•		L		1	01	ù	CORMORANTS Double-crested Cor
2	2)	0	ľ	•	•	•																HERONS AND BITTERNS.
	0	n	0	١.	•		•																. metrican Bittern .
																							2MVN2, GEESE, DUCKS
n	2	ī	n		•	•	•	•	•			•	•	٠	•	•		•	•	•	٠	•	naw2 gniltzidW
۱ د	5	2)	١	٠	٠	•	•	•			•	•	•	•		•	•			•	•	scood abanad •
ا ر	0		0	١.		•		•	•			•	•										92000 wond
	1		1	٠	•	٠		•	•			•	٠	•		•	•	•		•	•	•	Ross' Goose
0	2	2	2	٠	•	•	•	•	•			•	•	•	•								Mallard
	n	2	2	٠	•	•		•				•	•	•	•			•		•	•		Gadwall
	5	0	2		•								•	•						•	•	·	liptni¶ •
,	0	n	n			•	٠	•					•	•									Green-winged Tea
-	,	,	2	٠,	•	•	•						•										- Blue-winged Teal.
1	0	2	2	٠							•	•	•										Cinnamon Teal
- 1	2	2	2	-																			American Wigeon

Welcome to

REFUGE NATIONAL WILDLIFE SWAN RIVER

species of birds. beaver, river offer, muskrat, and at least 171 support elk, deer, moose, grizzly and black bear, grassland, marsh, and wooded river bottom Montana. The variety of habitats including Refuge is located 38 miles southeast of Kalispell, The 1,568-acre Swan River National Wildlife

River and the canals and creeks which cross the goldeneye winter in the open waters of the Swan Canada geese, whistling swan, mallard and birding throughout the spring, summer, and fall. Refuge on the Swan River provides excellent raptors and songbirds. A canoe trip through the terns, 23 species of waterfowl, and a variety of endangered bald eagle, great blue herons, black The Refuge provides nesting habitat for the

under the Society's Adopt-A-Refuge Program. Chapter of the National Audubon Society in 1987 Swan River NWR was adopted by the Flathead much time to the completion of this pamphlet. The Audubon Society members who have contributed sbecial thanks must go to Ellie Jones and other Refuge since its establishment in 1974. Very The following birds have been observed on the

		_		9 11
	S	S	F	W
DIPPERS	\vdash	7	\vdash	\vdash
Dipper	0		U	U
WRENS		a	1	
Winter Wren				
• Long-billed Marsh Wren	U	c	c	0
MOCKINGBIRDS				
• Gray Catbird	U	U	c	
THRUSHES, BLUEBIRDS		-	1	
— • American Robin	U	_	-	1
— • Varied Thrush	c	c	U	ľ
• Swainson's Thrush	U	U	Ü	'
Veery	0	U	0	
Mountain Bluebird	c	U	0	21
Townsend's Solitaire	0		ò	
KINGLETS, PIPITS				
Golden-crowned Kinglet	U	U	U.	U
Ruby-crowned Kinglet	U	U	U	U
Water Pipit	U		0	0
WAXWINGS, SHRIKES, STARLINGS				
Bohemian Waxwing	Ü			c
Cedar Waxwing	υ	U	U	ñ
Northern Shrike	Ų		U	U
• Starling	c	C .	υ	-
VIREOS, WOOD WARBLERS, WEAVER FINCHES				
— • Red-eyed Vireo	U	υ		
• Warbling Vireo	0	υ		
Orange-crowned Warbler	υ	U	U	× .
Nashville Warbler	U	U	U	(2)
• Yellow Warbler	c ·	c	U	1 G
Yellow-rumped Warbler	c	c	U	
Townsend's Warbler Northern Waterthrush	0	C .	U	
MacGillivray's Warbler	0	C	U	7
Common Yellowthroat	U	U	Ü	
Wilson's Warbler	0	U	0	
American Redstart	0	U	U	
House Sparrow	0	0	- 10	
BLACKBIRDS AND ORIOLES				
Bobolink	Ü	u	1.	
Western Meadowlark	Ü	Ü	U	
• Yellow-headed Blackbird			U	
• Red-winged Blackbird	c	c	U	
Brewer's Blackbird	U	c .	- 1	
• Brown-headed Cowbird	U	c		
TANAGERS				
Western Tanager				
GROSBEAKS, SPARROWS, AND FINCHES				
Black-headed Grosbeak				
Lazuli Bunting	0	U		
• Evening Grosbeak	Ü	Ü	,	u
Caralata Final	0	Ū	0	0
. 8		•		

			_	_	_
		S	S	F	w
	House Finch				
	Gray-crowned Rosy Finch	0			
	Common Redpoll				υ
	• Pine Siskin	c	c	ċ	U
	American Goldfinch	0	0	U	0
	• Red Crossbill	U	U	U	U
	White-winged Crossbill		*		0
	Rufous-sided Towhee	U	0	0	
	Savannah Sparrow	U	U	U	
	Grasshopper Sparrow	U		U	
. —	Vesper Sparrow	U	c	U	
	Lark Sparrow				
	Dark-eyed Junco				c
	Tree Sparrow				0
	Chipping Sparrow	0	U	u	
	Harris'Sparrow				U
	White-crowned Sparrow	U	u		0
	Fox Sparrow	0		0	
	Song Sparrow	اء		U	U
	Snow Bunting		9		Ü
				•	

PLEASE NOTE:

We would appreciate your help if you observe birds that are listed as rare to the Swan River National Wildlife Refuge or if you notice unusual concentrations or activities of birds on the Refuge. Please report the following information by letter or telephone to the Refuge Manager:

Your name, address	
date, weather, exact location _	
species, number of birds	#1 0
distinguishing features and/or_	· .

Where to write for current regulations and information:

Refuge Manager, Swan River NWR c/o Lost Trail NWR 6295 Pleasant Valley Road Marion, MT 59925 406/858-2216 FAX 406/858-2218

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE



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Birds of the



Swan River

NATIONAL WILDLIFE REFUGE

Montana